

# Georgia Department of Natural Resources

## Environmental Protection Division

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Judson H. Turner, Director

Land Protection Branch

Phone: 404/657-8600 FAX: 404/657-0807

November 25, 2013

Sara Lee Corporation and Rathon Corporation  
c/o Mr. Harvey M. Sheldon, Esq.  
Hinshaw & Culbertson  
222 North LaSalle Street, Suite 300  
Chicago, Illinois 60601

**VIA FIRST CLASS MAIL AND EMAIL**

**COPY**

Re: EPD Comments  
VRP Semiannual Reports 2, 3, 4, 5, and 6  
Diversey-Olympic Manufacturing (Former), HSI Site No. 10435  
3051 Olympic Industrial Drive, Smyrna, Georgia; Cobb County

Dear Mr. Sheldon:

The Georgia Environmental Protection Division (EPD) has completed its review of the above-referenced documents. Our comments, which also incorporate the results of discussions held between EPD, Sara Lee, and Rathon on September 19, 2013, are provided below.

1. The Risk Reduction Standards (RRSs) presented in the Summary of Risk Reduction Standards table in Appendix F of the December 2010 VRP semiannual report, and the Delineation Concentrations presented in Table 2-3 of the same report, are acceptable to EPD, with the following exceptions:
  - a. The Type 1 soil RRS for 1,1-dichloroethane should be 400 milligrams per kilogram (mg/kg).
  - b. The Type 4 groundwater RRS for 1,4-dichlorobenzene should be 0.0073 milligrams per liter (mg/L).
  - c. The Type 1 soil RRS for cis-1,2-dichloroethene (DCE) should be 7 mg/kg.
  - d. The Type 1 groundwater RRS for cis-1,2-DCE should be 0.070 mg/L.
  - e. The delineation concentration for cadmium in soil should be the Type 1 RRS of 2 mg/kg.
  - f. Manganese is not regulated under HSRA. Accordingly, an RRS for that substance has not been established.
  - g. The Type 3 soil RRS for zinc, for both surface and subsurface soils, should be 2,800 mg/kg.

Where appropriate, please revise both the Summary of Risk Reduction Standards and Table 2.3: Delineation Concentrations.

2. Remedial requirements for soil in the former sump area have been satisfied. Soil sample EX-6B-1, obtained from a depth of 20 to 22 feet below ground surface (BGS) at the former sump area in 2010, had a PCE concentration of 0.560 milligrams per kilogram (mg/kg). That concentration

exceeded the Type 1 soil RRS for PCE of 0.5 mg/kg (the Type 1 RRS is the least stringent RRS value for soil PCE on this site). Airgas Refrigerants, prospective purchaser of the Diversey property, conducted soil sampling on site on December 17, 2013, as a condition of a limitation of liability issued by EPD on October 31, 2012. Soil sampling was conducted at the former location of soil boring EX-6B-1. A soil sample obtained from a depth of 21 feet BGS had a PCE concentration of 0.023 mg/kg, which is below the Type 1 RRS for that substance.

3. EPD agrees that horizontal delineation of contaminated soil, as required under the VRP Act, is complete.
4. Pursuant to our email of October 16, 2013, to Trish Reifenger of Brown & Caldwell, the following wells have been removed from the VRP groundwater-monitoring itinerary, based upon their history of analytical non-detects or of detections below the applicable RRSs: MW-1R, MW-3R, MW5, MW-7R, MW-10, MW-13ar, MW-13b, MW-14, MW-14B, MW-17, MW-18, and MW-19. Pursuant to our follow-up email of October 18, 2013, to Trish Reifenger, resampling of those wells to certify to RRSs will not be necessary.
5. Given the historical lack of constituents of concern (COCs) in well MW-19, please discontinue sampling of that well for MNA geochemical parameters.
6. Please continue monitoring for manganese in groundwater at a minimum of one well where the concentrations are currently high.
7. Please install at least one additional well to complete horizontal delineation of groundwater contamination. The distance between the OW-74 well cluster and the OW-77 well cluster is close to 1,000 feet. In addition to lack of data on the plume width, if data from the OW-77 wells were to be used for horizontal delineation, covenants restricting groundwater usage would be required from all of the intervening properties between Diversey and the OW-77s.

Our preferred location for the additional well is on the S&S Realty property. If access would be a problem, our second choice for the well location is between the S&S property line and South Atlanta Road. If access would still be a problem, our third choice for the well location is on Elizabeth Lane, across South Atlanta Road from the S&S property.

8. As previously stated, EPD believes that the former Diversey facility is the likely source of contamination in the wells on the adjoining Olympic Associates warehouse property (we note that wells MW-9a and MW-9b on the warehouse property have not been sampled recently). Should Olympic Associates agree to come into the VRP as a qualifying property under Diversey, the installation of additional wells on the warehouse property may not be necessary. An existing well on the southern part of the warehouse property could possibly serve as a delineation well.
9. In Section 4.1.2 of the June 2012 and the December 2012 VRP semiannual progress reports, historical analytical data from off-site wells MW-9a and MW-9b is referenced to demonstrate horizontal delineation of benzene to the south. Given that those two wells have not been sampled since October 2009, analytical data from them should not be referenced in conjunction with current analytical data from other wells on site.
10. Regarding the Groundwater Modeling Technical Memorandum, presented in Appendix F of the June 2013 semiannual report, EPD has the following comments:

- a. Please provide the data quality objectives (DQOs) for the flow and solute-transport models. The DQOs were referenced in Section 1.3 of the technical memorandum, but were not specified.
  - b. Section 1.2.2 of the technical memorandum references an observed downward vertical gradient on site. Has the observed vertical gradient been measured in on-site wells, or simply theorized? If the vertical gradient has been measured, please provide the wells utilized, the date of the measurements, and the calculated vertical gradient.
  - c. Please provide a comprehensive, tabulated list of the data inputs used to run the fate and transport model MT3DMS. Specify whether the inputs were default literature values, in which case the sources should be cited, or from field data. Data inputs provided to EPD should include, where applicable, physical, chemical, and hydraulic properties of the aquifer and COCs. Examples of data inputs to be provided could include transmissivity, aquifer thickness, saturated thickness of aquifer, fractional organic carbon, soil-organic carbon partition coefficient, etc.
  - d. No information on calibration of the solute-transport model was included in the technical memorandum. Please provide a detailed narrative on calibration procedures, with accompanying figures and tables depicting projected contaminant concentrations over time versus concentrations measured in the field. EPD also noticed that no sensitivity analysis was included. If literature values are used as data inputs when calibrating the model, a sensitivity analysis is advisable to determine those data inputs to which the solute-transport model is most sensitive, and which will therefore most affect the projected length of the plume. Uncertainty regarding the value of a sensitive data input contributes to the overall uncertainty of the model.
  - e. A sodium-permanganate solution was injected into the site subsurface at the source area in 2007 and 2008, as part of an in-situ chemical oxidation (ISCO) pilot test. Accordingly, the analytical data used to calibrate the fate-and-transport model may not be reflective of natural attenuation processes. Additional data may need to be collected to determine what, if any, impact the ISCO injections have on the current groundwater and how that may be incorporated into MT3DMS.
  - f. In Section 3.2, the first bullet item states that no retardation factor was assumed in the transport model. However, in Attachment A: Decay Rate Calculations, a retardation factor of 3 was used for both TCE and cis-1,2-DCE. Please explain.
  - g. Please clarify how the decay rates in Attachment A were calculated. Include equations and definitions of the terms within those equations.
  - h. During sequential first-order decay of chlorinated ethenes, as a compound degrades, it is also being produced by the preceding compound in the sequence. An increasing concentration of vinyl chloride would be expected as cis-1,2-DCE degrades, but the solute-transport model does not account for an increasing concentration of that substance. Please explain.
11. EPD has reviewed the executed site-access agreement between Airgas Industries and the responsible parties (RPs), pursuant to a request made by the RPs' attorney during a September 19, 2013, meeting with EPD. EPD has no comments on the agreement, other than that EPD is not

bound by a contract between two private parties. Airgas must allow the RPs and EPD access to the property, pursuant to Condition 2 of our limitation of liability letter to Airgas, dated October 31, 2012.

12. The draft environmental covenant need not restrict property use to non-residential purposes (Item 4 in the draft covenant, "Activity and Use Limitation(s)"). The restriction on groundwater use in Item 5 fulfills the covenant's purpose. The rest of the language in the draft covenant is acceptable to EPD.

Sara Lee and Rathon must address these comments to EPD's satisfaction in order to demonstrate compliance with the provisions, purposes, standards, and policies of the Act. EPD may, at its sole discretion, review and comment on documents submitted by Sara Lee and Rathon. However, failure of EPD to respond to a submittal within any timeframe does not relieve Sara Lee and Rathon from complying with the provisions, purposes, standards, and policies of the Act.

Please address the comments in this letter in the next semiannual progress report, due December 31, 2013. If you have any questions, please contact Allan Nix of the Response and Remediation Program at (404) 657-8600.

Sincerely,



David Brownlee  
Unit Coordinator  
Response and Remediation Program

c: Trish Reifenberger, Brown & Caldwell (via email)  
Karl Forrest, Fine & Block for Jodaco, Inc. (via email)

File: HSI Site Number 10435